

AGC/WSDOT Structures Team Meeting

January 25, 2002

9:00 AM –12:00 PM NWR Corson Avenue Facility

Attendees:	Company	Phone	E-mail
Tom Madden	WSDOT	206-768-5861	maddent@wsdot.wa.gov
Barry Brecto	FHWA	360-753-9482	BarryBrecto@fhwa.dot.gov
Ralph Robertson	WSDOT-Eastern	509-324-6021	Robertr@wsdot.wa.gov
Ron Lewis	WSDOT	360-705-7827	LewisR@wsdot.wa.gov
John Quiggs	Quigg Bros.	360-533-1531	JohnQ@QuiggBros.com
Kevin Parrish	Mowat Constr.	425-398-0205	kevinp@mowatco.com
Charlie McCoy	Atkinson Const.	425-255-7551	cmcco@Atkn.com
Karsten Olson	Max J. Kuney	509-535-0651	karsten@maxkuney.com
John VanLund	WSDOT	360-705-7217	vanlunj@wsdot.wa.gov
Steve Roark	WSDOT	360-753-3633	roarks@wsdot.wa.gov
M. Sheikhezadeh	WSDOT	360-705-7828	sheikhm@wsdot.wa.gov
Forrest Dill	RCI Constr. Grp	253-863-5200	fdill@rci-group.com

The Dec. 7, 2001 minutes were approved with no changes. Kevin Parish introduced the guest presenter Roger Larson from the Bristol Machine Company. Millard Barney of the Concrete Technology also attended this meeting. Bruce Dibert of the NWR Mats Lab provided the Skidmore bolt tensioning equipment.

1. Cold Weather Concrete Specifications (Std. Specs. 6.05.3)

This new Spec is implemented. It is currently added to the amendments to the Standard Specifications in all contracts advertised.

2. Nolan Creek Preliminary Plans

John VanLund thanked the group for their valuable input given in the last meeting. He said advice was also sought from the Concrete Tech, the Central Premix, and Nebraska DOT. The Biological Assessment permit requirement may delay the ad date. The design however, will be completed at the end of February.

3. Construction Joints with Roughened Surfaces (Std. Specs. 6-02.3(12))

No new discussions.

Action item: Ron Lewis will continue working on this spec revision.

4. Tension Controlled Bolts (Std. Specs. 6-03.3(33))

Roger Larson of the Bristol machine Com. gave a presentation and hands on demonstration of the Tension Controlled Bolts. The following is some of the highlights:

- The patent for this type of bolts expired 15 years ago
- The Fastener Quality Act has never been passed by the AISC. There are currently no uniform standards.

- The bolts are available through five manufacturers in the US
- LaJune is the only one making type 3 bolts in the US
- Fully meets the A 325 and A 490 AISC requirements
- Bolt of choice in most major building construction
- Caltrans, Colorado, and Utah DOTs have used it
- Nut lubrication is crucial
- TCB are more expensive than the conventional bolts however, installation time and inspection time are substantially reduced
- Some concerns are that the bolt tightness cannot be verified for girder splices. Also, bolts that fail the minimum torque requirement must be burnt out.

Action item: More group discussions are necessary. It may be allowed on an experimental contract.

5. Stay in Place Forms

No new discussions.

6. Fractured Finned Finish

Ron Lewis passed out a proposal from the WSDOT architect Alex Young incorporating featured strips to break the continuous fractured finned pattern currently practiced by the WSDOT. This proposal may provide for usage of plastic liners, which is considerably cheaper than the elastomeric liners. The proposal was well received by the group. Another suggestion was use of Ashlar Stone finish. This architectural finish may yet be more cost effective.

7. Alaskan Way Viaduct

Tom Madden gave a presentation on the latest findings by the group he heads up regarding replacement alternatives of this bridge. Highlights from Tom's Presentation:

- There is a one in twenty chance the Bridge may not survive another earthquake
- Replacement will not be a capacity improvement project
- Retrofit cost is almost the same as replacement cost
- Timber relieving platform has decayed
- Bridge timber piles have splices and are in the liquefiable soil
- Bored tunnel, cut and cover tunnel, and elevated structure are some of the alternative under study

8. Goals and Accomplishments

Ron discussed the goals from last meeting and ask if there were any comments. Otherwise the following would be adopted;

- Perform Constructability reviews

- Strive to understand both sides of issues
 - Work to eliminate chronic areas of conflict
 - A forum for new technology or ideas
-in an arena that is non-project specific

9. New Topics

- Explore new design ideas from the Local Agencies
- Use of geosynthetic walls for permanent application
- Use of pre-cast wall panels for high walls >30'. Forrest Dill will e-mail Ron pictures of the 277th St. project in Auburn

10. Next Meeting March 1, 2002, 9:00 AM Corson Ave. Facility

Meeting changed to March 29, 2002 due to Annual meeting on March 4th.